

American Chestnut Restoration at the Milford Experimental Forest

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The Milford Experimental Forest (MEF), a Pinchot Institute program, is a 1,400-acre research forest adjacent to Grey Towers National Historic Landmark, Gifford Pinchot's ancestral Milford, Pennsylvania home. MEF projects address forestry and ecological problems significant to the Delaware Highlands region, such as ex-urban development, overabundant deer, and exotic species. This past fall the Forest established an American chestnut restoration project, which focuses on applied restoration, landowner involvement, and conservation education.

The American chestnut (*Castanea dentata*) once dominated the forests of Pennsylvania, just as it did throughout the Northeast. In fact, chestnuts comprised 25% or more of all trees in many stands. During the summer of 1910, a young Aldo Leopold, then a forestry student at the Yale Summer School of Forestry located on the site of the Milford Experimental Forest, sent a letter home noting that there was such a

heavy chestnut crop that it could probably feed the whole town of Milford for the coming winter. The thousands of nuts produced by each of these trees provided a stable mast crop used by many wildlife species, including grouse, deer, and bear.

Chestnut was also one of the most valuable timber species. Its fast-growing and rot-resistant wood was used for fence poles, musical instruments, and construction materials. In 1904, the chestnut blight (*Cryphonectria parasitica*), an Asiatic fungus, was discovered in New York City. Within 20 years, the east coast's fastest-growing hardwood was reduced to a species comprised of short-lived root sprouts.

The American chestnut is a charismatic tree that has come to represent not only the devastation of a species, but the many perils facing our northeastern forests. Restoring this mighty tree would enhance northern hardwood forest biodiversity, offer the opportunity to reestablish the tree as an agricultural crop, and would serve as a symbol of ecological restoration.

This year, the chestnut restoration project at the Milford Experimental Forest began with the planting of over 100 partially resistant hybrids and 200 nut-grafts using local twigs. In the fall, these trees will be transplanted from the greenhouse to a 32-acre section of our forest enclosed in a deer fence.

The next project was an April 1, 2004 workshop, hosted by the Pinchot Institute and the U.S. Forest Service at Grey Towers. MEF has invited over 30 chestnut scientists and restorationists, foresters, educators, and landowners on-site to review the



current state of American chestnut research and restoration practice, and explore what kinds of actions the Forest should take to encourage private landowners to participate in the chestnut restoration effort. Since deer-browsing is rapidly killing the existing chestnut stock, landowner involvement is particularly important to restoring chestnuts.

The workshop has helped guide the efforts of the Milford Experimental Forest to establish a successful chestnut restoration program—one that will restore American chestnuts with local genes, genes that have evolved over millions of years to live in this specific habitat of the Delaware Highlands.

For more information on our chestnut program or workshop, or on any other projects of the Milford Experimental Forest, please contact Leila Pinchot at lpinchot@hotmail.com or Peter Pinchot peterpin@aol.com. You can also contact the Forest at (570) 296-9313 or write to 322 Schocopee Rd, Milford, PA 18337.

